6	ATI 14
DATE IN 5-3-10	JSPENSE ENGINEER W.A. LOGGED IN 53-10 THE SWD APP NO. 1012428729
<u> </u>	ABOVE THIS LINE FOR DIVISION USE ONLY
	NEW MEXICO OIL CONSERVATION DIVISION $OXYUSA$
	- Engineering Bureau - 1220 South St. Francis Drive, Santa Fe, NM 87505
	Wert rea U
	ADMINISTRATIVE APPLICATION CHECKLIST 30-05-28281
THIS CHECKLIS	IS MANDATORY FOR ALL ADMINISTRATIVE APPLICATIONS FOR EXCEPTIONS TO DIVISION RULES AND REGULATIONS WHICH REQUIRE PROCESSING AT THE DIVISION LEVEL IN SANTA FE
Application Acro [NSL-Non	lyms: Standard Location] [NSP-Non-Standard Proration Unit] [SD-Simultaneous Dedication]
[DHC-	Downhole Commingling] [CTB-Lease Commingling] [PLC-Pool/Lease Commingling] C-Pool Commingling] [OLS - Off-Lease Storage] [OLM-Off-Lease Measurement]
U.	[WFX-Waterflood Expansion] [PMX-Pressure Maintenance Expansion]
[EOR-	[SWD-Salt Water Disposal] [IPI-Injection Pressure Increase] Qualified Enhanced Oil Recovery Certification] [PPR-Positive Production Response] ,
[1] TYPE O	APPLICATION - Check Those Which Apply for [A] $\frac{1}{10525}$
[#	J Location - Spacing Unit - Simultaneous Dedication
C	z
[1	heck One Only for [B] or [C]] Commingling - Storage - Measurement
	DHC CTB PLC PC OLS OLM
[0	Injection - Disposal - Pressure Increase - Enhanced Oil Recovery
[])] Other: Specify Amend P-tosas - Raise BisP. Of A
[2] NOTIFIC	ATION REQUIRED TO: - Check Those Which Apply, or Does Not Apply
-	
[]	
[(Application is One Which Requires Published Legal Notice - Attached
[]	V] Notification and/or Concurrent Approval by BLM or SLO U.S. Bureau of Land Management - Commissioner of Public Lands, State Land Office
[]	J For all of the above, Proof of Notification or Publication is Attached, and/or,
[]	Waivers are Attached
L. L.	

7

[3] SUBMIT ACCURATE AND COMPLETE INFORMATION REQUIRED TO PROCESS THE TYPE OF APPLICATION INDICATED ABOVE.

[4] **CERTIFICATION:** I hereby certify that the information submitted with this application for administrative approval is **accurate** and **complete** to the best of my knowledge. I also understand that **no action** will be taken on this application until the required information and notifications are submitted to the Division.

Note: Statement must be completed by an individual with managerial and/or supervisory eapaoity.

Duvid Stewart	Da.	Stat .	SR. Res. Hughst	4(30/10
Print or Type Name	Signature		Title	Date

1.1

Net Federal #2

deni 2 stewart Ooxy.com e-mail Address

STATE OF NEW MEXICO ENERGY, MINERALS AND NATURAL RESOURCES DEPARTMENT

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Oil Conservation Division 1220 South St. Francis Dr. Santa Fe, New Mexico 87505

APPLICATION FOR AUTHORIZATION TO INJECT

I.	PURPOSE: Secondary Recovery Pressure Maintenance X_Disposal Storage Application qualifies for administrative approval? X_Yes No	
II.	OPERATOR:	
	ADDRESS:P.O. Box 50250 Midland, TX 79710	
	CONTACT PARTY: <u>David Stewart</u> PHONE: <u>432-685-5717</u>	
III.	WELL DATA: Complete the data required on the reverse side of this form for each well proposed for injection. Additional sheets may be attached if necessary.	
IV.	Is this an expansion of an existing project? X Yes No If yes, give the Division order number authorizing the project: <u>R-10525</u>	
V.	Attach a map that identifies all wells and leases within two miles of any proposed injection well with a one-half mile radius circle drawn around each proposed injection well. This circle identifies the well's area of review. <u>Attached</u>	
VI.	Attach a tabulation of data on all wells of public record within the area of review which penetrate the proposed injection zone. Such data shall include a description of each well's type, construction, date drilled, location, depth, record of completion, and a schematic of any plugged well illustrating all plugging detail. <u>Attached</u>	
VII.	Attach data on the proposed operation, including:	
	 Proposed average and maximum daily rate and volume of fluids to be injected; <u>2600BWPD - 4000BWPD</u> Whether the system is open or closed; <u>Closed</u> Proposed average and maximum injection pressure; <u>910psi</u> Sources and an appropriate analysis of injection fluid and compatibility with the receiving formation if other than reinjected produced water; and, <u>Attached</u> If injection is for disposal purposes into a zone not productive of oil or gas at or within one mile of the proposed well, attach a chemical analysis of the disposal zone formation water (may be measured or inferred from existing literature, studies, nearby wells, etc.). <u>Attached</u> 	
*VIII.	Attach appropriate geologic data on the injection zone including appropriate lithologic detail, geologic name, thickness, and depth. Give the geologic name, and depth to bottom of all underground sources of drinking water (aquifers containing waters with total dissolved solids concentrations of 10,000 mg/l or less) overlying the proposed injection zone as well as any such sources known to be immediately underlying the injection interval. <u>Attached</u>	
IX.	Describe the proposed stimulation program, if any. Attached	
*X.	Attach appropriate logging and test data on the well. (If well logs have been filed with the Division, they need not be resubmitted).	
*XI.	Attach a chemical analysis of fresh water from two or more fresh water wells (if available and producing) within one mile of any injection or disposal well showing location of wells and dates samples were taken. No active water wells within one mile. One	
XII.	Application qualifies for administrative approval?	
XIII.	Applicants must complete the "Proof of Notice" section on the reverse side of this form. Attached	
XIV.		
	NAME: David Stewart TITLE: Sr. Regulatory Analyst	
	SIGNATURE: DATE: 430(10	
	E-MAIL ADDRESS:david_stewart@oxy.com	

* If the information required under Sections VI, VIII, X, and XI above has been previously submitted, it need not be resubmitted. Please show the date and circumstances of the earlier submittal: Side 2

III. WELL DATA

- A. The following well data must be submitted for each injection well covered by this application. The data must be both in tabular and schematic form and shall include:
 - (1) Lease name; Well No.; Location by Section, Township and Range; and footage location within the section.
 - (2) Each casing string used with its size, setting depth, sacks of cement used, hole size, top of cement, and how such top was determined.
 - (3) A description of the tubing to be used including its size, lining material, and setting depth.

(4) The name, model, and setting depth of the packer used or a description of any other seal system or assembly used.

Division District Offices have supplies of Well Data Sheets which may be used or which may be used as models for this purpose. Applicants for several identical wells may submit a "typical data sheet" rather than submitting the data for each well.

- B. The following must be submitted for each injection well covered by this application. All items must be addressed for the initial well. Responses for additional wells need be shown only when different. Information shown on schematics need not be repeated.
 - (1) The name of the injection formation and, if applicable, the field or pool name.
 - (2) The injection interval and whether it is perforated or open-hole.
 - (3) State if the well was drilled for injection or, if not, the original purpose of the well.
 - (4) Give the depths of any other perforated intervals and detail on the sacks of cement or bridge plugs used to seal off such perforations.
 - (5) Give the depth to and the name of the next higher and next lower oil or gas zone in the area of the well, if any.
- XIV. PROOF OF NOTICE

All applicants must furnish proof that a copy of the application has been furnished, by certified or registered mail, to the owner of the surface of the land on which the well is to be located and to each leasehold operator within one-half mile of the well location.

Where an application is subject to administrative approval, a proof of publication must be submitted. Such proof shall consist of a copy of the legal advertisement which was published in the county in which the well is located. The contents of such advertisement must include:

- (1) The name, address, phone number, and contact party for the applicant;
- (2) The intended purpose of the injection well; with the exact location of single wells or the Section, Township, and Range location of multiple wells;
- (3) The formation name and depth with expected maximum injection rates and pressures; and,

(4) A notation that interested parties must file objections or requests for hearing with the Oil Conservation Division, 1220 South St. Francis Dr., Santa Fe, New Mexico 87505, within 15 days.

NO ACTION WILL BE TAKEN ON THE APPLICATION UNTIL PROPER PROOF OF NOTICE HAS BEEN SUBMITTED.

NOTICE: Surface owners or offset operators must file any objections or requests for hearing of administrative applications within 15 days from the date this application was mailed to them.

INJECTION WELL DATA SHEET

Side 1

OPERATOR: OXY USA Inc.				
WELL NAME & NUMBER:Neff Federal #3				
WELL LOCATION: 430 FNL 760 FWL FOOTAGE LOCATION	NWNW(D) UNIT LETTER	25 SECTION	22S 31E TOWNSHIP RANGE	
WELLBORE SCHEMATIC		<u>WELL CONSTK</u> Surface Casing	<u>WELL CONSTRUCTION DATA</u> Surface Casing	
	Hole Size:		Casing Size:13-3/8" @ 810'	
	Cemented with:		or	$_{\rm ft^3}$
	Top of Cement: _	Surface	Method Determined:Circulated	
		Intermediate Casing	te Casing	
	Hole Size:		Casing Size:8-5/8" @ 4306'_	
	Cemented with:	1800sx.	or	.ft ³
	Top of Cement:	Surface	Method Determined:Circulated	
		Production Casing	<u>ı Casing</u>	
	Hole Size:	7-7/8''	Casing Size:5-1/2:" @ 8460'	
	Cemented with:	sx.	or	ft ³
	Top of Cement:	Surface	Method Determined:Circulated_	
	Total Depth:	8460'	(
		Injection Interval	Interval Ball Composition)
	45	4550feet	feet to4660feet	et
		(Perforated or Open Hole; indicate which)	ole; indicate which)	

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INJECTION WELL DATA SHEET

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Side 2

Form 3160-5 (June 1990) Do not use this fo	DEPARTMENT BUREAU OF LA SUNDRY NOTICES A form for proposals to drill	D STATES OF THE INTERIOR ND MANAGEMENT ND REPORTS ON WELLS or to deepen or reentry to a different PERMIT—" for such proposals	NM OIL CONS COMMISSION Drawer DD FORM APPROVED Budge Budge B
1. Type of Well	SUBMIT II	N TRIPLICATE	7. If Unit or CA, Agreement Designation
2. Name of Operator	Other	CONFIDENTIAL	8. Well Name and No. Neff Federal No. 3
Pogo Produc 3. Address and Telephone	No.		9. API Well No. 30-015-28281
4. Location of Well (Footag	0340, Midland, TX 7 ge. Sec. T. R. M. or Survey Descr 760' FWL, Section 2	iption)	10. Field and Pool, or Exploratory Area Livingston Ridge Delaware 11. County or Parish, State Eddy County, NM
12. CHECK	APPROPRIATE BOX(s)	TO INDICATE NATURE OF NOTIC	CE, REPORT, OR OTHER DATA
TYPE OF	SUBMISSION		
	of Intent ent Report bandonment Notice	Abandonment Recompletion Plugging Back Casing Repair Altering Casing Other D & Production	Change of Plans Change of Plans New Construction Non-Routine Fracturing Water Shut-Off Conversion to Injection Dispose Water (Note: Report results of multiple completion on Well Completion or Recompletion Report and Log form.)

 Describe Proposed or Completed Operations (Clearly state all pertinent details, and give pertinent dates, including estimated date of starting any proposed work. If well is directionally drilled, give subsurface locations and measured and true vertical depths for all markers and zones pertinent to this work.)*

Drilled 7-7/8" hole to 8460'. TD reached @ 2230 hrs CST 01/31/95. Logged well w/ Western Atlas. Ran 192 jts 5-1/2", 15.5# & 17#, J-55 & N-80 LT&C casing. Float shoe @ 8460'. Float collar @ 8419'. Stage tools @ 3973' & 6177'. Howco cemented 1st stage w/ 575 sx Class "H" + 5 pps Microbond + 2.4 pps KCl + .6% H-322 @ 15.6 ppg. Drop plug. Float held. Drop bomb and open DV tool @ 6177'. Circulated 5 hrs between stages. Recovered 66 sxs excess cement. Cement 2nd stage w/ 420 sxs Halliburton Lite @ 12.4 pps followed by 100 sx Class "C" @ 14.8 ppg. Land plug. Float held. Drop bomb & open DV tool @ 3973'. Circulate 5 hrs between stages. Recovered 77 sxs excess cement. Cement 3rd stage w/ 350 sx Halliburton Lite @ 12.4 pps followed by 100 sx Class "C" @ 14.8 ppg. Plug down. Tool classed @ 0615 hrs CST 2/3/95. Recovered 57 sxs excess cement. Set slips and make cut-off. ND BOP's and weld on wellhead & test to 2500 psi.

		ON, DIV. 1st. 2
14. I hereby certify that the foregoing is true and correct Signed	Tide Senior Operations Engineer	C
(This space for Federal or State office use) Approved by	Tide	ROCENTED FOR OUT
Conditions of approval, if any:		1 1995
Title 18 U.S.C. Section 1001, makes it a crime for any person know or representations as to any matter within its jurisdiction.	ited States any false, fictitious or fraudulent statements	
	*See Instruction on Reverse Side	

Form 3160-4 (October 1990)			STATES	SUBMIT	IN DUPLIC	с •ъм	OIL CON	SOR COM	ROVED ISF
					1 2		awer Bibir	rs: Decen	994701.1991 CIDI
					reve	erse sideA1	NM-25365	ан анхтто 5	JN AND SERIAL NO.
WELL CO	OMPLETION (DR RECOM	APLETION	REPORT A					
14. TYPE OF WE	ILL: QII. WELL	XXI SAN	DRY	Other			7. UNIT AGR	EEMENT	NAMB
				Other					
Pogo Prod	ducing Compan	у			. *				
				(<u> </u>
P. U. BOX	(10340, Midl	and, IX 7	9702-7340	(915)682-	6822				
At surface									
At top prod. in							OR AREA	•	
		C	ONE		2		Section	25 1	225 P315
At total depta	Same	A 2	14. PERMIT NO.	DA	TE ISSUED				1 13. STATE
					12/8/	94	PARISH		
15. DATE SPUDDED	1				LEVATIONS (DF. RK8. 5		1	EY. CASINGHEAD
· · · · · · · · · · · · · · · · · · ·	1 -//				2.7' GR	<u> </u>			
						制度)LS [CABLE TOOLS
	1		BOTTOM, NAME (S					25.	
70501 601					ADD 1 0	1005		ļ	SURVEY MADE
			ID & TVD)	:	AFR 10				No
		i		A 20	(A		10/		S WELL CORED
	·····	0180	NC RECORD (Per				<u> </u>		
	WEIGHT, LB./FT.	DEPTH SET	(MD) HO	LE SIZE	- 3151	ENERT. CEM	ENTING RECORD	, 1	AHOUNT PULLED
13-3/8	54.5#	810	17-1	1/2 1	000 sxs	-circ	250 sxs	- -	
5-1/2	<u> 15.5# & </u>	<u>.7 * 846</u>	0 7-7	7/81	<u>545 sxs</u>	-circ	<u>57 sxs</u>		
29	LI	NER RECORD			30		L'BING RECO		
aire			SACKS CEMENT*	SCREEN (MD)	SIZE				PACKER SET (MD)
					2-7/8		3059		
]					
7050'-68' (3650" d	ia holes)			VAL (MD)				
				/					
8220'-40' (4050" dia	n holes)		8220'-40'		Acdz	w/ 1000		7-1/2% HC1
						Frac	w/ 16800	00 <u># 16</u>	5/30 sand
CONSISTING UN ED STATES STBNT IN DUPLIC Net Other Net State DEPARTMEN, OF THE INTERIOR BUREAU OF LAND MANGEMENT International and the state of t									
2/23/95							shu		lucina
			PROD'N. POR	OIL-BBL.	GAS	с у .	WATER-BBL		
									the second s
PLOW. TUBING PRIME.	CASING PRESSURE	CALCULATED 24-HOUR BATE		1			HBL.	• • •	-
34. DISPOSITION OF	GAB (Bold, used for fu	el, vented, etc.)		1 3) 	300	TEST WITNES		
35. LIST OF ATTACE			<u> </u>	77	1				<u></u>
Logs, C-104	, Deviation S	Survey, Su	indries	J'm	<u> </u>				
15		ind attached in:	cormation is comp	iete and correct	as determin	ied from a	il available r		
SIGNED	and Am	sul .	TITLE SE	enior Oper	ations	Engine	er DATE	3/1	5/95

*(See Instructions and Spaces for Additional Data on Reverse Side)

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Fitle 18 U.S.C. Section 1001, makes it a crime for any person knowingly and willfully to make to any department or agency of the United States any false, fictitious or fraudulent statements or representations as to any matter within its jurisdiction.

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30-015-28281

OGRID - 17891 PLOP 9337 POOL - 39360

101-01 + 2 B+T W+P

IT IS THEREFORE ORDERED THAT:

Order No. R-10525 12/14/95

(1) The applicant, Pogo Producing Company, is hereby authorized to institute a pilot pressure maintenance project on a portion of its Neff Federal Lease which comprises all of Section 25, Township 22 South, Range 31 East, NMPM, Eddy County, New Mexico, by the injection of water into the Brushy Canyon member of the Delaware formation, Livingston Ridge-Delaware Pool, through the perforated interval from approximately 7,050 feet to 7,068 feet in its Neff Federal Well No. 3 located 430 feet from the North line and 760 feet from the West line (Unit D) of said Section 25.

(2) The pilot project area shall initially comprise the N/2 NW/4 and the SW/4 NW/4 of Section 25.

(3) Any proposed expansions of the subject pilot pressure maintenance project by the addition of injection wells and/or additional lands shall be considered by the Division only after notice and hearing.

Conv. to WIW MIT 3-14-96

Confictution 6-16-95 March 16, 1995 z-Dinileg comp Nution &A S-8455 Vanna Ray X-Y Caliper 1298-8455

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2113910-0

2113930- C

			$\mathcal{C} ^{\mathcal{C}}$							
Form 3160-5 June 1990)	DEPARTMENT	OF THE INTERIOR	FORM APPROVED Budget Bureau No. 1004-0135 Expires: March 31, 1993							
			5. Lease Designation and Serial No. NM-25365							
Do not use this form for p	proposals to drill o	or to deepen or reentry to a different reservoir.	6. If Indian, Allottee or Tribe Name							
1. Type of Well			8. Well Name and No.							
	ther		Neff #3 WIC							
• •	,									
			9. API Well No. 30-015-28281							
P. O. Box 10340, Midland,	10. Field and Pool, or Exploratory Area Livingston Ridge Del.									
	11. County or Parish, State									
			Eddy County, NM							
12. CHECK APPRO	OPRIATE BOX(s) T	O INDICATE NATURE OF NOTICE, REPORT, O	R OTHER DATA							
TYPE OF SUBMI	SSION	TYPE OF ACTION								
Notice of Intent		Abandonment	Change of Plans							
4° * 2		Recompletion	New Construction							
X Subsequent Repo	ort	Plugging Back	Non-Routine Fracturing							
		Casing Repair	U Water Shut-Off							
Final Abandonme	ent Notice	Altering Casing	Conversion to Injection							
		Other	 Dispose Water (Note: Report results of multiple completion on Well Completion or Recorrigicion Report and Log form.) 							
			of starting any proposed work. If well is							
Ran GR correla Ran intensity tra Ran velocity pro	ition 7508 - 6800 acer with I-131 6980 -									
Tracer showed no channel	loss above perfs 705	0 - 68. Test was witnessed by Gary Williams with the A	rtesia NMOCD. Chart attached.							

		ATT 125262
14. I hereby pertify that the foregoing is true and correct Signed (A) (This space for Federal or State office use)	Title Operations Technician	Date 04/27/99
Approved by Conditions of approval, if any:	Title	Date

Title 18 U.S.C. Section 1001, makes it a crime for any person knowingly and willfully to make to any department or agency of the United States any false, fictitious or fraudulent statements or representations as to any matter within its jurisdiction. ____

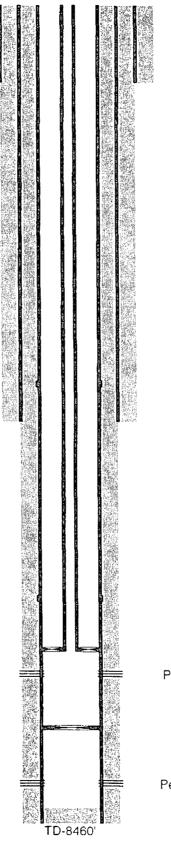
=====

OXY USA Inc. - Current Neff Federal #3 API No. 30-015-28281

Formation Tops Rustler - 730' T Salt - 1190' B Salt - 4202' Delaware - 4477' Bell Cany - 4528' Cherry Cany - 5352' Brushy Cany - 6593' Bone Spring - 8350'

2-7/8" tbg w/ pkr @ 7060'

12/95-CIBP @ 7510'



17-1/2" hole @ 810' 13-3/8" csg @ 810' w/ 1000sx-TOC-Surf-Circ

11" hole @ 4306' 8-5/8" csg @ 4306' w/ 1800sx-TOC-Surf-Circ

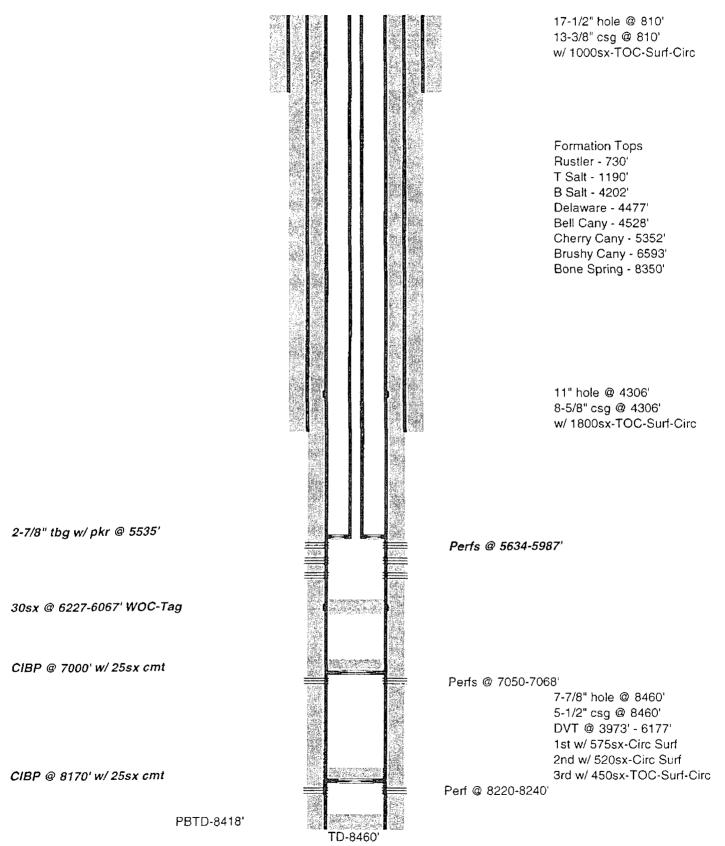
Perfs @ 7050-7068'

7-7/8" hole @ 8460' 5-1/2" csg @ 8460' DVT @ 3973' - 6177' 1st w/ 575sx-Circ Surf 2nd w/ 520sx-Circ Surf 3rd w/ 450sx-TOC-Surf-Circ

Perf @ 8220-8240'

PBTD-8418'

OXY USA Inc. - Proposed Neff Federal #3 API No. 30-015-28281



(August 1999) DEPARTMENT	ND MANAGEMENT AND REPORTS O proposals to drill or t m 3160-3 (APD) for s	N WELLS o re-enter an such proposals.	OPY	FORM AP OMB NO. Expires: Nover 5. Lease Serial No. NM- 25345 6. If Indian, Allottee 7. If Unit or CA/Agre	1004-0135 mber 30, 2000
		14	SWD	8. Well Name and No Neff Federal	o. ∦3
OXY USA Inc. 3a. Address P.O. Box 50250 Midland, TX 7971 4. Location of Well (Footage, Sec., T., R., M., or Survey L 430 FNL 760 FWL NWNW(D) Sec 25 T2	0 Description)	3b. Phone No. (<i>include ar</i> 432-685-5717		 9. API Well No. 30-015-28281 10. Field and Pool, or Livingston Ridg 11. County or Parish, 	ge Delaware
		Eddy	NM		
12. CHECK APPROPRIATE	BOX(ES) TO INDI		PE OF ACTION		
X Notice of Intent	Acidize	Deepen Fracture Treat			Water Shut-Off Veli Integrity
Final Abandonment Notice	Casing Repair Change Plans Convert to Injection	New Construction Plug and Abandon X Plug Back	Recomplet Temporaril Water Disp	y Abandon	Other
 Describe Proposed or Completed Operation (clearly If the proposal is to deepen directionally or recomp Attach the Bond under which the work will be per following completion of the involved operations. It testing has been completed. Final Abandonment M determined that the final site is ready for final inspect 1. MI & RU DDPU. 2. POOH w/Tbg-and Packer 3. RIH & tag CIBP @ 7510', M&P 25 4. M&P 25sx cmt @ 6227-6127' WOC- 5. Set CIBP at 4800'. POOH w/ tb 6. RU Electric Line Unit and perf 3-3/8" Power Jet 340637" h 7. RD ELU. Run Tbg and packer & 8. Perform injection test on rese and report results to engineer will need stimulation to achie 9. Place well on injection. 	lete horizontally, give sub formed or provide the Bo f the operation results in a lotices shall be filed only ction.) sx cmt on top of Tag g. orate 4550-4600' oles w/6 JSPF (60 set packer at 450 rvoir per the att . (Note: inject	surface locations and mea and No. on file with BLM/ a multiple completion or no after all requirements, in SEE A CIBP COND & 4610-4660' W/ 00 Total Shots) on 00'. tached injection p ion test will be a	sured and truit ver BIA. Required su completion in a n cluding reclamatic TTACHE ITIONS (1 1 60 degree prog from Ar run to deter	tical depths of all pertin absequent reports shall new interval, a Form 310 on, have been complete D FOR DF APPROV phasing. phasing. to Pressure mine if well	ent markers and zones. be filed within 30 days 60-4 shall be filed ones d, and the operator has
*This work will not take place un PET Withess	til an amended SW		oved.		
14. I hereby certify that the foregoing is true and correct Name (Printed/Typed) David Stewart		Title Sr. Re	gulatory Ana	alyst	
Ver Stat		Date 414	PROI	/FD	
	SPACE FOR FEDE	RAL OR STATE OF	HUE USE V		
Approved b Conditions of approval, if my, are attached. Approval of certify that the applicant folds legal or equitable title to which would entitle the applicant to conduct operations th Title 18 U.S.C. Section 1001, and Title 43 U.S.C. Section States any false, fictitious or fraudulent statements or repr	those rights in the subjec	i lease ISI	MAY 26 Dustin W	inkler	r agency of the United

OXY USA, Inc. NM-25365: Neff Federal #3 API: 30-015-28281 Eddy County, New Mexico

RE: Plug back and Recomplete NOI - Conditions of Approval

There is to be no surface disturbance beyond the existing pad. A closed loop system is to be used. H2S monitoring and protection equipment is to be on site.

<u>Notification:</u> Contact the appropriate BLM office at least 24 hours prior to the commencing of any plugging operations. For wells in Eddy County, call 575-361-2822.

3M BOP to be used. All blowout preventer (BOP) and related equipment (BOPE) shall comply with well control requirements as described in Onshore Oil and Gas Order No. 2 and API RP 53 Sec. 17.

- 1. OK
- 2. OK
- Change: Drill out CIBP, and spot a minimum 25sx plug of Class H from PBTD to 8170'. If perfs drink too much cement, a CIBP can be placed after a 2nd attempt at 8170' with 35' bailed or 25sx pumped Class H. (Bone Spring – Perfs)
- 3a. Set CIBP at 7000' with 35' bailed or 25sx pumped cement as per schematic. (Perfs)
- 4. Plug to be a minimum 160'. Tag at 6067' or shallower Otherwise OK (DV Tool)
- 5. OK
- 6. OK
- 7. OK
- 8. A NOI to stimulate the well will be required Otherwise OK
- 9. OK

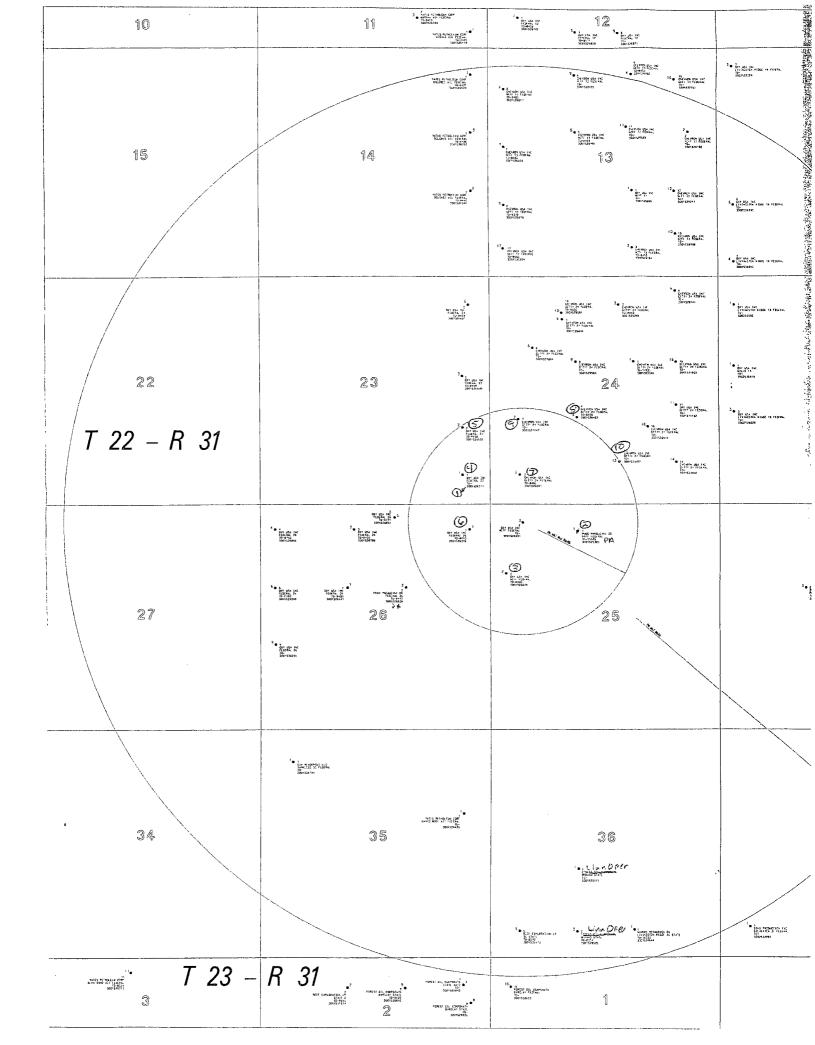
Submit subsequent report with wellbore schematic and completion report once work is completed.

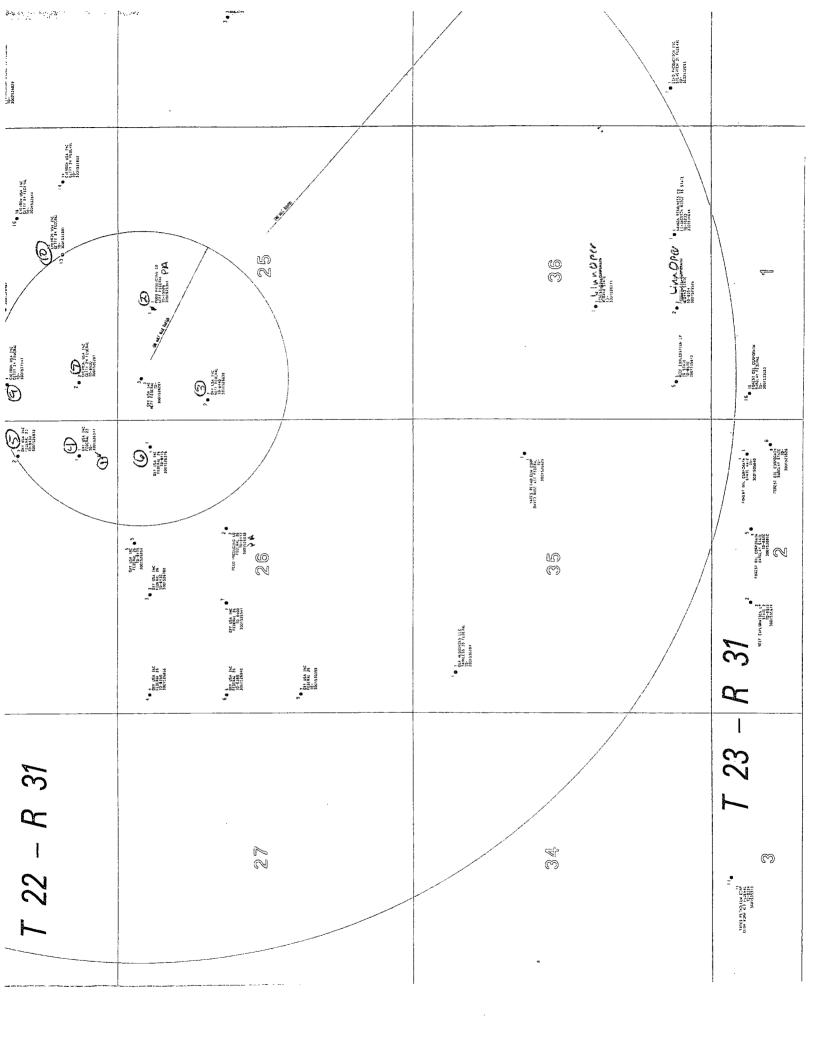
DHW 050410

NEFF FEDERAL #3 1/2 Mile AREA OF REVIEW C-108 - ATTACHMENT B

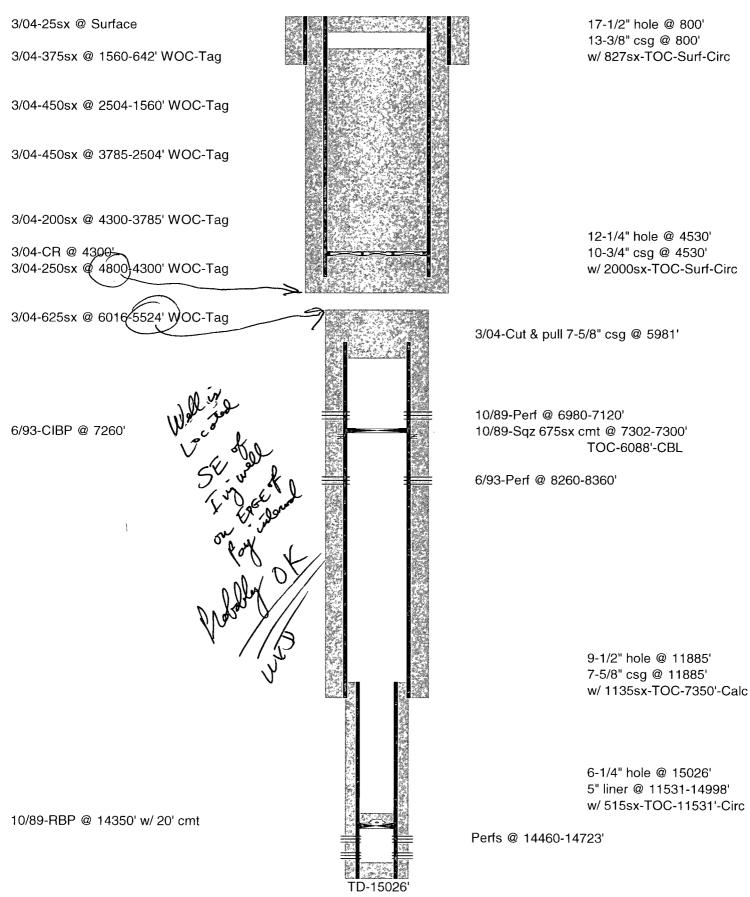
		_				≥				`	>				2			7	2		7				7			7			7			>	
STATUS	T&A-4/62	70/5-000	WBD Attached		P&A-3/04	WBD Attached				Active Oil	Livingston Ridge	Delaware	Active Oil	Livingston, Ridge	Delaware		Active Oil	Livingston Ridge	Delaware	Active Oil	Livingston Ridge	Delaware		Active Oil	Livingston Ridge	Delaware	Active Oil	Livingston Ridge	Delaware	Active Oil	Livingston Ridge	Delaware	Inactive Oil	Livingston Ridge	Delaware
CASING-CEMENT	0-E/08 @ 3031 M / 00Eck - HOU-SirkE-Cirko	X9077 /M			13-3/8" @ 800' w/ 827sx - TOC-Surf-Circ	10-3/4" @ 4530' w/ 2000sx - TOC-Surf-Circ	7-5/8" @ 5981-11885' w/ 1135sx - TOC-6088-CBL	5" @ 11531-14998' w/ 515sx - TOC-11531'-Circ		13-3/8" @ B14' w/ 1000sx - TOC-Surf-Circ	8-5/8" @ 4340' w/ 1675sx - TOC-Surf-Circ	5-1/2" @ 8440' w/ 1285sx - TOC-3620'-CBL	13-3/8" @ 845' w/ 800sx - TOC-Surf-Circ	8-5/8" @ 4394' w/ 1340sx - TOC-Surf-Circ	5-1/2" @ 8420' w/ 12405x - TOC-3750'-CBL		13-3/8" @ 828' w/ 1000sx - TOC-Surf-Circ	8-5/8" @ 4279' w/ 1700sx - TOC-Surf-Circ	5-1/2" @ 8430' w/ 1400sx - TOC-1250'-CBL	13-3/8" @ 850' w/ 900sx - TOC-Surf-Circ	8-5/8" @ 4447' w/ 1280sx - TOC-Surf-Circ	5-1/2" @ 8415' w/ 1220sx - TOC-2900'-CBL		11-3/4" @ 840' w/ 700sx - TOC-Surf-Circ	8-5/8" @ 4500' w/ 1350sx - TOC-Surf-Circ	5-1/2" @ 8000' w/ 1950sx - TOC-Surf-Circ	11-3/4" @ 840' w/ 800sx - TOC-Surf-Circ	8-5/8" @ 4350' w/ 1550sx - TOC-Surf-Circ	5-1/2" © 8400' w/ 1750sx - TOC-Surf-Circ	11-3/4" @ 785' w/ 500sx - TOC-Surf-Circ	8-5/8" @ 4408' w/ 1065sx - TOC-Surf-Circ	5-1/2" @ 8550' w/ 1475sx - TOC-1175'-CBL	13-3/8" © 790' w/ 950sx - TOC-Surf-Circ	8-5/8" @ 4397' w/ 1300sx - TOC-Surf-Circ	5-1/2" @ 8583' w/ 1400sx - TOC-Surf-Circ
PERFS		1								7024-8108'			6760-8198'				7000-8257'			6960-8318'			ļ	6604-7101'			6970-8264'			7030-8170			6582-8336'		
Ę	10964	4 / DO			15026					8440'			84201				8430'			8415'	-		1	80001			84001			8550'			86001		
DATE DRILLED	63/81/8	79/74/7			5/30/85					16/1/01			 6/20/90				3/30/92			5/30/90				2/24/90			 11/15/91			6/15/96			8/2/02		
LOCATION	320 BCT 330 BBT	130 FSL 330 FEL	P-23-22S-31E		660 FNL 1980 FWL	C-25-22S-31E				1650 FNL 330 FWL	E-25-22S-31E		660 FSL 660 FEL	P-23-22S-31E			1750 FSL 660 FEL	I-23-22S-31E		610 FNL 510 FEL	A-26-22S-31E			660 FSL 660 FWL	M-24-22S-31E		1980 FSL 1980 FWL	K-24-22S-31E		1980 FSL 660 FWL	L-24-22S-31E		990 FSL 2310 FEL	0-24-22S-31E	
PLAT	-	-		_	2					m			 4			-	5			و				7			 8			6			10		
API NO. 30-	016 06030	22820-2T0			015-25301					015-26639			015-26377				015-26932			015-26376				015-26287			015-26482			015-27147			015-31801		
WELL NO.	-	-1			1					- 14			1				2			1				2			4			7			13		
LEASE	Tariate Tari	wright-rea			Neff Fed					Neff Fed			Federal 23				Federal 23			Federal 26				Getty 24 Fed			Getty 24 Fed			Getty 24 Fed			Getty 24 Fed		
OPERATOR		Pre-Ungard			Pogo					OXY			ОХУ				OXY			охи				Chevron			Chevron			Chevron			Chevron		

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Pogo Producing Co. Neff Federal #1 - P&A 3/30/04 API No. 30-015-25301

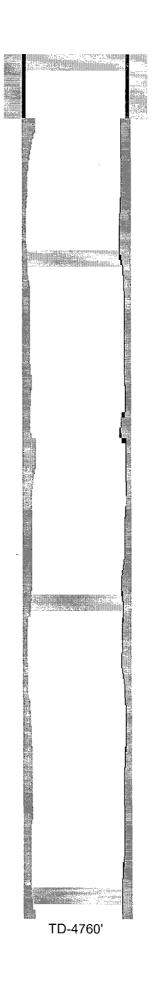


Texas Crude Oil Co.-Pre-Ongard Wright-Federal #1 - P&A 4/25/62 API No. 30-015-05839

20sx @ Surface

35sx @ 1190'

35sx @ 3095'



11" hole @ 323' 8-5/8" csg @ 323' w/ 225sx-TOC-Surf-Circ

7-7/8" OH @ 323-4760'

De la vore-Rensey MITCHELL ANALYTICAL LABORATORY

2638 Faudree Odessa, Texas 79765-8538 561-5579

Company: Nalco Company

90.0

.627

120.0

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Well Number:	50% Federal 23-9	Sample Temp:	70
Lease:	50% Cotton Draw #15	Date Sampled:	4/21/2010
Location:	OXY	Sampled by:	Casey Summers
Date Run:	4/22/2010	Employee #:	
Lab Ref #:	10-apr-n53588	Analyzed by:	DOM

			Dissolved C	Fases			
Hydrogen Sulfide Carbon Dioxide Dissolved Oxygen	(H2S) (CO2) (O2)		NOT ANA NOT ANA		Mg/L .00	Eq. Wt. 16.00	MEq/L .00
			Cations				
Calcium	(Ca++)			1	7,245.80	20.10	858.00
Magnesium	(Mg++)				2,547.36	12.20	208.80
Sodium	(Na+)			5	54,648.70	23.00	2,376.03
Barium	(Ba++)		NOT ANAL	YZED			
Manganese	(Mn+)				10.46	27.50	.38
			Anions				
Hydroxyl	(OH-)		Anons		.00	17.00	.00
Carbonate	(CO3=)				.00	30.00	.00
BiCarbonate	(HCO3-				12.22	61.10	.20
Sulfate	(SO4=)				297.00	48.80	6.09
Chloride	(CI-)			12	2,034.09	35.50	3,437.58
					,		_,
Total Iron	(Fe)				12.19	18.60	.66
Total Dissolved Solid					6,807.82		
Total Hardness as C				5	53,558.68		
Conductivity MICRO	MHOS/CM				210,200		
рН 6.59	0			Specific G	Fravity 60/6	0 F.	1.137
CaSO4 Solubility @ 8	0 F.	13.	21MEq/L,	CaSO4 sca	le is unlikely	/	
CaCO3 Scale Index							
70.0	.127	100.0	.627	130.0	1.72	.7	
80.0	.247	110.0	1.007	140.0	1.72	27	

Nalco Company

150.0

2.387

1.007

Dekware

MITCHELL ANALYTICAL LABORATORY

2638 Faudree Odessa, Texas 79765-8538 561-5579

Company: Nalco Company

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Well Number:	Federal 23-9	Sample Temp:	70
Lease:	OXY	Date Sampled:	4/20/2010
Location:		Sampled by:	Casey Summers
Date Run:	4/22/2010	Employee #:	
Lab Ref #:	10-apr-n53575	Analyzed by:	DOM

Dissolved Ga	ses
--------------	-----

			Dissoivea C				
				М	g/L	Eq. Wt.	MEq/L
Hydrogen Sulfi	de (H2S)				.00	16.00	.00
Carbon Dioxide	e (CO2)		NOT ANA	LYZED			
Dissolved Oxyg	jen (O2)		NOT ANAI	LYZED			
			Cations				
Calcium	(Ca++)	`	Canons	20,638	68	20.10	1,026.80
Magnesium	(Ca++) (Mg++			2,400		12.20	196.80
Sodium	(Ng+))		65,752		23.00	2,858.79
Barium	(Ba++)	N	NOT ANAL			23.00	2,030.79
Manganese	(Mn+)	,			.05	27.50	.22
Manganese	((((())))))))))))))))))))))))))))))))))			C	.05	27.50	.22
			Anions				
Hydroxyl	(OH-)				.00	17.00	.00
Carbonate	(CO3=))			.00	30.00	.00
BiCarbonate	(HCO3-	·)		12	.22	61.10	.20
Sulfate	(SO4=))		144	.00	48.80	2.95
Chloride	(Cl-)			144,859	.17	35.50	4,080.54
							·
Total Iron	(Fe)			20	.15	18.60	1.08
Total Dissolved				233,833	.34		
Total Hardness				61,440			
Conductivity M	ICROMHOS/CM			229,9	900		
рН	6.350			Specific Gravity	60/60	F.	1.163
CaSO4 Solubilit	y @ 80 F.	9	.21MEq/L,	CaSO4 scale is u	nlikely		
CaCO3 Scale Inde	ex						
70.0	.615	100.0	1.365	130.0	2.365		
80.0	.765	110.0	1.985	140.0	2.365		
90.0	1.365	120.0	1.985	150.0	2.365		

Nalco Company

Kunsey

MEq/L

688.80

221.20

.54

.00

.00

.20

.23

9.22

2,791.80

1,890.45

.00

MITCHELL ANALYTICAL LABORATORY

2638 Faudree Odessa, Texas 79765-8538 561-5579

Company: Nalco Company Well Number: Cotton Draw #15 Sample Temp: 70 Lease: OXY Date Sampled: 4/20/2010 Location: Sampled by: **Casey Summers** Date Run: 4/22/2010 Employee #: Lab Ref #: 10-apr-n53576 Analyzed by: DOM Dissolved Gases Mg/L Eq. Wt. Hydrogen Sulfide (H2S) 16.00 .00 Carbon Dioxide (CO2) **NOT ANALYZED Dissolved Oxygen** NOT ANALYZED (02) Cations 20.10 Calcium (Ca++)13,844.88 Magnesium (Mg++)2,698.64 12.20 Sodium (Na+)43,480.44 23.00 Barium (Ba++) NOT ANALYZED Manganese (Mn+)27.50 14.87 Anions Hydroxyl (OH-) .00 17.00 Carbonate (CO3=) .00 30.00 BiCarbonate (HCO3-) 12.22 61.10 Sulfate (SO4=) 450.00 48.80 Chloride (CI-) 99,108.90 35.50 Total Iron (Fe) 4.22 18.60 Total Dissolved Solids 159,614.17 Total Hardness as CaCO3 45,676.62 Conductivity MICROMHOS/CM 190,500 6.830

Specific Gravity 60/60 F. pН 1.111CaSO4 Solubility @ 80 F. 17.59MEq/L, CaSO4 scale is unlikely CaCO3 Scale Index 70.0 -.169 100.0 .231 130.0 .911 80.0 -.049 110.0 .531 140.0 .911 90.0 .231 120.0 .531 150.0 1.301

Nalco Company

Attachment C-108 OXY USA Inc. Neff Federal #3

VIII.

Injection zones for the Neff Federal 3 well, Sect 25, T22S, R30E Eddy county, New Mexico.

The proposed injection for the Neff Federal 3 is over a 1500, interval within the Bell Canyon, and upper parts of the Cherry Canyon formations of the Delaware Mountain Group. The Delaware Mountain Group is a Guadalupian Permian interval found at approximately 4200' MD at this location. The formation is comprised of a series of interbedded sands, shales and carbonates, The majority of the interval is comprised of sands. The sands are characterized as basinal turbidites and debris flows. As such, they occur as thin tabular elongate units with long axis running roughly north to south. Porosity and permeability are good in the horizontal direction and poor in the vertical direction due to the interbedded shales. Water should remain in the interval into which it is injected and not to migrate vertically away from the interval.

The Delaware Mountain group is overlain by the Late Permian Ochoan Salado and Castile formations. The Castile is banded Anhydrite and Calcite with occasional salt beds. The Salado is a salt formation. The combined thickness of the Salado and Castile at this location is approximately 3000' This interval acts as a seal for the underlying reservoirs and is impermeable to the migration of fluids from the Delaware Mountain Group into shallower formations.

Above the Salado is the Rustler formation. It is made up of layers of Dolomite, Anhydrite, siltstone and salt. The Dolomites within the Rustler are recognized as the lowest occurring aquifers in the area.

XI.

I have examined available geologic and engineering data and find no evidence of open faults or any other hydrologic connection between the disposal zone and any underground sources of drinking water.

Permian Geologist

Service List - C-108 Amended SWD Application OXY USA Inc. - Neff Federal #3

United States Dept of Interior Bureau of Land Management 620 E. Greene Street Carlsbad, NM 88220-6292

. : -

New Mexico Oil Conservation Division 1301 W. Grand Ave. Artesia, NM 88210

New Mexico Oil Conservation Division 1220 South St. Francis Dr. Santa Fe, NM 87505

Chevron USA Inc. 15 Smith Road Midland, TX 79705

OXY USA Inc. P.O. Box 50250 Midland, XT 79710

Affidavit of Publication

State of New Mexico County of Eddy, ss.

Kathy McCarroll, being first duly sworn, on oath says:

That she is the Classified Supervisor of the Carlsbad Current-Argus, a newspaper published daily at the City of Carlsbad, in said county of Eddy, state of New Mexico and of general paid circulation in said county; that the same is a duly qualified newspaper under the laws of the State wherein legal notices and advertisements may be published; that the printed notice attached hereto was published in the regular and entire edition of said newspaper and not in supplement thereof on the date as follows, to wit:

April 22____

2010

That the cost of publication is **\$44.71** and that payment thereof has been made and will be assessed as ¢ourt costs.

and L Subscribed and sworn to before me Unil Dail this dav of (人 ۵n Sa My commission expires Doly Notary Public OFFICIAL SEAL STEPHANIE DOBSON Notary Public State of New Mex

My Comm Expires

•= =
April 22, 2010
Notice Of Application For Fluid Disposal
Applicant: OXY USA Inc. P.O. Box 50250 Midland, TX 79710 ATTN: David Stew- art 432-685-5717
Purpose - Well: Disposal of Produced Water *1.110.5 FA Zone Productive *0f *011 & Gas Neff Federoi #3 430 FNL 760 FWL 430 FNL 760 FWL T225.R31E Eddy County, NM
Formation: Delaware - Romsey Sand 4550-4660'' Maximum Injection Rate - 4000 BWPD Maximum Injection Pressure - 910 psi
Interested parties must file objections or requests for hear- ing with the Oil Con- servation Division, 1220 South St. Fran- cis Dr., Santa Fe, New Mexico 87505 within 15 days of this application.

BENDER: COMPLETE THIS SECTION	COMPLETE THIS SECTION ON DEL	IVERY
 Complete items 1, 2, and 3. Also complete item 4 if Restricted Delivery is desired. 	A. Signature	···
 Item 4 in restricted beivery is desired. Print your name and address on the reverse so that we can return the card to you. 	X	Addressee
 Attach this card to the back of the mailpiece, or on the front if space permits. 	B. Received by (Printed Name)	C. Date of Delivery
I. Article Addressed to:	D. Is delivery address different from iter If YES, enter delivery address below	-
Bem		
620 E. Greene St.		
620 E. Greene St. Carlsbud, NM	3. Service Type	п
88220		eipt for Merchandise
	4. Restricted Delivery? (Extra Fee)	C Yes
2. Article Number (Transfer from service label) 700503	90 0002 9920 7665	
PS Form 3811, February 2004 Domestic Ret	urn Receipt	102595-02-M-1540
SENDER COMPLETE THIS SECTION	COMPLETE THIS SECTION ON DEL'I	/ERY
Complete items 1, 2, and 3. Also complete	A. Signature	
item 4 if Restricted Delivery is desired. Print your name and address on the reverse	X	Agent Addressee
 so that we can return the card to you. Attach this card to the back of the mailpiece, or on the front if space permits. 	B. Received by (Printed Name)	C. Date of Delivery
1. Article Addressed to:	 D. Is delivery address different from item If YES, enter delivery address below 	
NMOCO		
1301 W. Grand Ave.		
1301 W. Grand Ave. Artosia, NMBBZIO	3. Serviçã Type	
A LEVEL IN A BRID	Certified Mail D Express Mail	pt for Merchandise
	Insured Mail C.O.D. A. Restricted Delivery? (Extra Fee)	□ Yes
2. Article Number (Transfer from service label) 7005 0	390 0002 9920 7672	
PS Form 3811, February 2004 Domestic Retu		102595-02-M-1540
SENDER: COMPLETE THIS SECTION	COMPLETE THIS SECTION ON DELI	/ERY
Complete items 1, 2, and 3. Also complete item 4 if Restricted Delivery is desired.	A. Signature	Agent
 Print your name and address on the reverse so that we can return the card to you. Attach this card to the back of the mailpiece. 		C. Date of Delivery
or on the front if space permits.	D. Is delivery address different from item	1? 🗆 Yes
1. Article Addressed to:	If YES, enter delivery address below	
STATE OF NEW MEXICO		1 1 1
ENERGY & MINERALS DEPARTMENT OIL CONSERVATION DIVISION		
1220 SOUTH ST. FRANCIS DR.	3. Service Type	
SANTA FE, NM 87505	Registered Return Rece Insured Mail C.O.D.	pt for Merchandise
2. Article Number	4. Restricted Delivery? (Extra Fee)	I Yes
(Transfer from service label) ? [] [] 5 [] 3	90 0002 9920 7689	l
PS Form 3811, February 2004 Domestic Retu	urn Receipt	102595-02-M-1540
SENDER: COMPLETE THIS SECTION	COMPLETE THIS SECTION ON DELI	VERY
Complete items 1, 2, and 3. Also complete	A. Signature	Agent
item 4 if Restricted Delivery is desired. Print your name and address on the reverse so that we can return the card to you.	X	Addressee
 Attach this card to the back of the mailpiece, or on the front if space permits. 	B. Received by (Printed Name)	C. Date of Delivery
1. Article Addressed to:	D. Is delivery address different from item If YES, enter delivery address below	
		ŀ
Chevron USIA Inc.		1
15 Smith Rd.	3. Service Type	
Midland TX 79705	Certified Mail D Express Mail	pt for Merchandise
	Insured Mail C.O.D. Restricted Delivery? (Extra Fee)	□ Yes
2. Article Number 7005 0	1390 0002 9920 7696	
(Transfer from service label)		

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SENDER: COMPLETE THIS SECTION	COMPLETE THIS SECTION ON DELIVERY
Complete items 1, 2, and 3, Also complete	A. Signature
item 4 if Restricted Delivery is desired.	A / AV a X D'Addressee
so that we can return the card to you.	B. Riccelefet by (Printed Manyer C. Date of Delivery
or on the front if space permits. 1. Article Addressed to:	D. Is delivery eddress stillerent from term 17 D Yes
29	If YES, enter delivery address below: 🛛 No
NMOCO	
1301 W. Grand Ave.	
Artesia NMBBZD	3. Service Type Grentfied Mail Express Mail Registered Return Receipt for Merchandise
	D Insured Mail C.O.D.
2. Article Number	4. Restricted Delivery? (Extra Fee)
(Transfer from service label) 7005	0390 0002 9920 7672
· · · · · · · · · · · · · · · · · · ·	slum Receipt 102598-02-M-1540
SENDER: COMPLETE THIS SECTION	A Signature
Complete items 1, 2, and 3. Also complete tem 4 If Restricted Delivery Is desired.	V 2 0 / X Agent
Print your name and address on the reverse so that we can return the card to you.	SK Received by (Printed Name) . C. Date of Delivery
Attach this card to the back of the mailplece, or on the front if space permits.	Toe salcido 573
1. Article Addressed to:	D. Is delivery address different from item 1? / D Yes If YES, enter delivery address below: / D No
Bim	
620 E. Greene St.	
Carlsbud, NM	3. Service Type
88220	Registered Return Receipt for Merchandise
	Insured Mail El C.O.D. A. Restricted Delivery? (Extra Fee) Yes
2. Article Number	
(Transfer from service label) 7005 03	10 0002 9920 7665
S Form 3811, February 2004 Domestic Rat	um Receipt 102595-02-M-1540
Complete items 1, 2, and 3. Also complete	A Signature /
item 4 if Restricted Delivery is desired. Print your name and address on the reverse	X (lla hut / Agent
so that we can return the card to you.	B. Received by (Printed Name) C. Date of Delivery
or on the front if space permits.	D. is delivery address different from item 1? Yes
1. Article Addressed to:	If YES, enter delivery address below: D No
STATE OF NEW MEXICO ENERGY & MINERALS DEPARTMENT	
ULL CONSERVATION DIVISION	3. Serviçe Type
1220 SOUTH ST. FRANCIS DR. SANTA FE, NM 87505	Gentified Mail 🔲 Express Mail
87505	Registered Return Receipt for Merchandise Insured Mail C.O.D.
	4. Restricted Delivery? (Extra Fee) Yes
2. Article Number 7005 03 (Transfer from service label)	90 0002 9920 7689
PS Form 3811, February 2004 Domestic Ret	urn Receipt 102595-02-M-1* v
· · · · · · · · · · · · · · · · · · ·	
SENDER: COMPLETE THIS SECTION	COMPLETE THIS SECTION ON DELIVERY
Complete items 1, 2, and 3. Also complete "	A. Signature
item 4 if Restricted Delivery is desired. Print your name and address on the reverse	X Agent
so that we can return the card to you. Attach this card to the back of the mailpiece,	B. Becsived by (Printed Name) C. Date of Delivery
or on the front if space permits.	D. is delivery address different from itom 1? D Yes
1, Article Addressed to:	If YES, enter delivery address below: 🔲 No
Chevran USA Inc.	
15 Smith Rd.	3. Service Type
Midland TX 79705	Certified Mall Express Mall
	Registered Return Receipt for Merchandise Insured Mall C.O.D.
	4. Restricted Delivery? (Extra Fee)
2. Article Number 7005	0390 0002 9920 7696
PS Form 3811, February 2004 Domestic Re	
SENDER: COMPLETE THIS SECTION	COMPLETE THIS SECTION ON DELIVERY
Complete items 1, 2, and 3. Also complete	A Signature
item 4 if Restricted Delivery is desired. Print your name and address on the reverse	A TARA A DATE Addressee
so that we can return the card to you. Attach this card to the back of the mailpiece,	B. Received by (Printed Name) C. Date of Delivery
or on the front if space permits.	D. Is delivery address different from tain 13 D Yes
1. Article Addressed to:	If YES, enter delivery address below No
Western AG-Minerab Co.	$\left[\left[2m_{s} + 2m_{s} \right] \right]$
P.O. Box 71 Camboland, Non 68221	
Cembert 1)11	3. Service Type
INT 68221	E Cartified Mali
	Registenid Return Receipt for Merchandise Insured Mail G.O.D.
	4. Restricted Dalivery? (Extra Fee)
2. Article Number (Transfer from service label) 70050	5077 05PP 5000 0FE
PS-Form S811. February 2004 Domestic Re	tum Receipt 102595-02-44-1540 -

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From:	Jones, William V., EMNRD
Sent:	Friday, June 04, 2010 10:01 AM
То:	'david.stewart@oxy.com'
Cc:	'Wesley_Ingram@blm.gov'; Ezeanyim, Richard, EMNRD; Gray, Darold, EMNRD; Reeves, Jacqueta, EMNRD
Subject:	Disposal application from OXY USA, Inc.: Neff Federal #3 30-015-28281 Bell Canyon

Hello David:

Thank you for the application – very well done.

Only items I see are:

- a. Please provide notice to the nearest Potash Leaseholder
- b. Let me know who is the Surface owner.
- c. Send the dates the notices were mailed out the certified receipts dates are not showing up on my copies.
- d. How will you test this upper Bell Canyon interval for productivity? you could send a log analysis showing the estimated capability of production.
- e. The Wright Federal #1 30-015-05839 will need to be re-entered and re-plugged and we can issue a conditional permit stating this requirement.

Thanks Again,

William V Jones. P.E. Engineering, Oil Conservation Division 1220 South St. Francis Drive, Santa Fe, NM 87505 Tel 505.476.3448 ~ Fax 505.476.3462



-----Original Message-----From: Dustin_Winkler@blm.gov [mailto:Dustin_Winkler@blm.gov] Sent: Wednesday, June 09, 2010 3:31 PM To: Jones, William V., EMNRD Cc: Wesley_Ingram@blm.gov Subject: Re: Wright Federal #1 30-015-28281 replug requirement (OXY's SWD application for the Neff Federal #3 30-015-28281)

Will,

No we do not. With the proximity to potash and the problems that have come up with other SWD within the potash area causing H2S to be detected in the salt section, the BLM feels that this location would not be in the best interest of the public.

Thanks,

Dusty Winkler Petroleum Engineer Bureau of Land Management Carlsbad Field Office 575-234-5914

"Jones. William

	·····	
	V., EMNRD"	
-	<william.v.jones@< td=""><td></td></william.v.jones@<>	
То	<pre>state.nm.us></pre>	< <u>Dustin_Winkler@blm.gov</u> >,
		< <u>Wesley_Ingram@blm.gov</u> >
сс	06/09/2010 03:23	
	PM	
Subject		
Subject		Wright Federal #1 30-015-28281
		replug requirement (OXY's SWD
#3		application for the Neff Federal
		30-015-28281)

From:	Dustin Winkler@blm.gov
Sent:	Wednesday, June 09, 2010 4:01 PM
То:	Jones, William V., EMNRD
Subject:	RE: Wright Federal #1 30-015-28281 replug requirement (OXY's SWD application for the Neff Federal #3 30-015-28281)

Will,

Yes, the BLM does protest.

Thanks,

Dusty Winkler Petroleum Engineer Bureau of Land Management Carlsbad Field Office 575-234-5914

"Jones, William V., EMNRD" <william.v.jones@< th=""><th>To</th></william.v.jones@<>	To
state.nm.us>	To < <u>Dustin_Winkler@blm.gov</u> >
06/09/2010 03:59	cc
PM	Subject RE: Wright Federal #1 30-015-28281 replug requirement (OXY's SWD application for the Neff Federal #3 30-015-28281)

Dustin: So does the BLM protest Oxy's application for disposal?

(Oxy's application to use the Neff Federal #3 30-015-28281 for disposal into the Upper Delaware from 4550 to 4660 feet)

Just confirming what I think you said....

Will Jones New Mexico Oil Conservation Division Images Contacts RE: Disposal application from OXY USA, Inc.: Neff Federal #3 30-015-28281 Bell Canyon

Hello David Stewart: I got your phone call earlier....

Also today we received a protest from the BLM in Carlsbad (Mr. Dustin Winkler). The BLM protests this OXY application for disposal – please contact the BLM in Carlsbad for information concerning this.

Due to the protest, the Division can no longer consider this application administratively. Please consult your attorney for advice on how to proceed from here.

I will retain this paperwork pending your decision on what to do. Please alert me if you enter a case for hearing.

Regards,

Will Jones New Mexico Oil Conservation Division Images Contacts

From: Jones, William V., EMNRD
Sent: Friday, June 04, 2010 10:17 AM
To: 'David_Stewart@oxy.com'
Subject: FW: Disposal application from OXY USA, Inc.: Neff Federal #3
30-015-28281 Bell Canyon

From: Jones, William V., EMNRD
Sent: Friday, June 04, 2010 10:01 AM
To: 'david.stewart@oxy.com'
Cc: 'Wesley_Ingram@blm.gov'; Ezeanyim, Richard, EMNRD; Gray, Darold, EMNRD;
Reeves, Jacqueta, EMNRD
Subject: Disposal application from OXY USA, Inc.: Neff Federal #3
30-015-28281 Bell Canyon

Hello David: Thank you for the application - very well done.

Only items I see are:

From:Dustin_Winkler@blm.govSent:Thursday, July 08, 2010 12:22 PMTo:Jones, William V., EMNRDCc:David_Stewart@oxy.com; Dade, Randy, EMNRD; Ezeanyim, Richard, EMNRDSubject:RE: Disposal application from OXY USA, Inc.: Neff Federal #3 30-015-28281 Bell CanyonAttachments:pic15248.jpg

Will,

After talking with our solid minerals group, and Wesley, the BLM does not object to the Neff Fed #3 converting to an SWD within the Cherry Canyon.

Thanks,

Dusty Winkler Petroleum Engineer Bureau of Land Management Carlsbad Field Office 575-234-5914

"Jones, William V., EMNRD" <william.v.jones@ state.nm.us></william.v.jones@ 	To < <u>David_Stewart@oxy.com</u> >
	СС
06/09/2010 04:37	"Ezeanyim, Richard, EMNRD"
PM	< <u>richard.ezeanyim@state.nm.us</u> >,
	< <u>Dustin Winkler@blm.gov</u> >, "Dade,
	Randy, EMNRD"
	< <u>Randy.Dade@state.nm.us</u> >
	Subject
	RE: Disposal application from OXY USA, Inc.: Neff Federal #3
	30-015-28281 Bell Canyon

Hello David Stewart: I got your phone call earlier....

Also today we received a protest from the BLM in Carlsbad (Mr. Dustin Winkler). The BLM protests this OXY application for disposal – please contact the BLM in Carlsbad for information concerning this.

Due to the protest, the Division can no longer consider this application administratively.

From:Jones, William V., EMNRDSent:Thursday, July 08, 2010 1:19 PMTo:David_Stewart@oxy.comCc:'Dustin_Winkler@blm.gov'Subject:RE: Disposal application from OXY USA, Inc.: Neff Federal #3 30-015-28281 Bell Canyon

Hello David: The protest is withdrawn.

Did you folks address the other concerns or think about them? I have forgotten...

Regards,

Will Jones New Mexico Oil Conservation Division Images Contacts

-----Original Message-----From: Dustin_Winkler@blm.gov [mailto:Dustin_Winkler@blm.gov] Sent: Thursday, July 08, 2010 12:22 PM To: Jones, William V., EMNRD Cc: David_Stewart@oxy.com; Dade, Randy, EMNRD; Ezeanyim, Richard, EMNRD Subject: RE: Disposal application from OXY USA, Inc.: Neff Federal #3 30-015-28281 Bell Canyon

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Thanks,

Dusty Winkler Petroleum Engineer Bureau of Land Management Carlsbad Field Office 575-234-5914

"Jones, William		
V., EMNRD" <william.v.jones@< td=""><td></td><td>То</td></william.v.jones@<>		То
state.nm.us>	<david_stewart@oxy.com></david_stewart@oxy.com>	
	(сс
06/09/2010 04:37 PM	<pre>"Ezeanyim, Richard, EMNRD" <richard.ezeanyim@state.nm.us>, <dustin_winkler@blm.gov>, "Dade, Randy, EMNRD" <randy.dade@state.nm.us></randy.dade@state.nm.us></dustin_winkler@blm.gov></richard.ezeanyim@state.nm.us></pre>	
	Subje	ct

From:	David_Stewart@oxy.com
Sent:	Monday, July 12, 2010 1:34 PM
То:	Jones, William V., EMNRD
Cc:	dustin_winkler@nm.blm.gov; Dade, Randy, EMNRD
Subject:	RE: Disposal application from OXY USA, Inc.: Neff Federal #3 30-015-28281 Cherry Canyon
Attachments:	NeffFd3ChryCan.ppt; NeffFd3GeolData-ChryCan.doc; img-712130509-0001.pdf

Will please see attached for the information for item d. I have also attached a copy of the proposed sundry notice for the recompletion to the Cherry Canyon that will be mailed to the BLM today. If you need any additional information, please let me know and I appreciate the help.

Thanks, David S. 432-685-5717

From: Stewart, David
Sent: Thursday, July 08, 2010 3:26 PM
To: 'Jones, William V., EMNRD'
Cc: Dustin_Winkler@blm.gov
Subject: RE: Disposal application from OXY USA, Inc.: Neff Federal #3 30-015-28281 Bell Canyon

Will, I had worked up most of the responses to your earlier request, but didn't send it to you since by the time I had it worked up you notified me of the BLM protest. I will need to get the proposed Cherry Canyon interval that they plan to inject and will have them work up the response to item d. Do I need to re-submit or send additional notices since we are changing the interval? I appreciate the help.

a. Please provide notice to the nearest Potash Leaseholder - Western AG Minerals, application mailed to them 6/8/10, received 6/11/10, copy of signed certified returned receipt is attached.

- b. b. Let me know who is the Surface owner. BLM
- c. c. Send the dates the notices were mailed out the certified receipts dates are not showing up on my copies. The notices were mailed 4/30/10 when the application was submitted, please see attached for a copy of the signed certified returned receipts.
- d. d. How will you test this upper Bell Canyon interval for productivity? you could send a log analysis showing the estimated capability of production. pending, will have to get our operations people to work this up for the Cherry Canyon.
- e. e. The Wright Federal #1 30-015-05839 will need to be re-entered and re-plugged and we can issue a conditional permit stating this requirement. This well was drilled to 4760' and plugged as a dry hole withonly the 8-5/8" casing that was set to 323' left in the hole. There were three 35sx plugs set in the openhole @ 4560', 3095', 1190' and one 20sx plug at surface. When you say wewill need to re-enter and plug do you mean to spot a surface casing plug, because there is only open hole below the 8-5/8" casing @ 323'. and after almost 50 years we would probably have to re-drill the entire openhole.

Thanks, David S. 432-685-5717 Fax-432-685-5742 Attachment C-108 OXY USA Inc. Neff Federal #3

Injection zones for the Neff Federal 3 well, Sec 25, T22S, R30E Eddy county, New Mexico.

The proposed injection for the Neff Federal 3 is over a 550' interval within the Cherry Canyon formation of the Delaware Mountain Group. The Delaware Mountain Group is a Guadalupian Permian interval comprised of three formations, the Bell Canyon, the Cherry Canyon and the Brushy Canyon. The shallowest formation, at the top of the Delaware Mountain Group, is the Bell Canyon. The Bell Canyon is approximately 1000 ft thick. It is found at 4526' MD at this location. The Cherry Canyon, the target formation for water injection lies below the Bell Canyon and above the Brushy Canyon. The Cherry Canyon is approximately 1200 ft thick and is encountered at 5352 feet measured depth. The formation is comprised of a series of interbedded sands, shales and carbonates, The majority of the interval is comprised of sands. The sands are characterized as basinal turbidites and debris flows. As such, they occur as thin tabular elongate units with long axis running roughly north to south. Porosity and permeability are good in the horizontal direction and poor in the vertical direction due to the interbedded shales. Water should remain in the interval into which it is injected and not to migrate vertically away from the interval.

The Delaware Mountain group is overlain by the Late Permian Ochoan Salado and Castile formations. The Castile is banded Anhydrite and Calcite with occasional salt beds. The Salado is a salt formation. The combined thickness of the Salado and Castile at this location is approximately 3000' This interval acts as a seal for the underlying reservoirs and is impermeable to the migration of fluids from the Delaware Mountain Group into shallower formations.

Above the Salado is the Rustler formation. It is made up of layers of Dolomite, Anhydrite, siltstone and salt. The Dolomites within the Rustler are recognized as the lowest occurring aquifers in the area. The Neff Federal 3 has several zones in the Upper Cherry Canyon that, based on GR and phie curve response, show good sand development and should make good SWD targets. In the Neff Federal 3 well the base of the salt is at 4475' md. The top of the Cherry Canyon is 877' below the base of the salt at 5352' md.

The intervals for injection are as follows:

Top of Interval	Bottom of Interval	Thickness
5634	5670	36
5764	5782	18
5792	5805	13
5817	5841	24
5853	5890	37
5904	5935	31
5948	5987	39

All of the intervals are above the producing Cherry Canyon intervals

Below are the productive zones in Cherry Canyon

Well	Zone	Тор	op Bottom	
ELRU #01	LCM		6,762	6,773
ELRU #06	LCM		6,660	6,688
ELRU #12	LCM		6,706	6,720
Getty 24 Fed #10	LCM		6,443	6,497
Neff 13 Fed #09	LCM		6,483	6,510
ELRU #05	LCM-Will		6,722	6,752
ELRU #06	LCM-Will		6,723	6,742
ELRU #12	LCM-Will		6,760	6,790
Federal 26 #02	LCM-Will		6,521	6,535
Federal 26 #05	LCM-Will		6,496	6,538
Getty 24 Fed #09	LCM-Will		6,545	6,552
Getty 24 Fed #10	LCM-Will		6,503	6,526
Getty 24 Fed #11	LCM-Will		6,590	6,612
Getty 24 Fed #13	LCM-Will		6,582	6,588
Getty 24 Fed #15	LCM-Will		6,601	6,624
Getty 24 Fed #16	LCM-Will		6,596	6,602
Neff 13 Fed #09	LCM-Will		6,548	6,570

Injection Permit Checklist (03/15/2010) 3/0UIC SWD 1229 WFX Permit Date Case R-PMX # Wells Well Name: API Num: (30-) のぼ (UIC primacy March 7, 1982) Spud Date: New/Old: N 76 Ful Unit D Sec 25 Tsp 225 ROSIE 30FN2 Footages County Contact D. TNC Operator: _RULE 5.9 Compliance (Wells)_ 1779 OGRID: 166 K 5.9 OK? OK (Finan Assur) Operator Address: PO. BOX 50250 MIPLAND TX 7 170 Current Status: ReperPointer Swp R-10525 Planned Work to Well: _-P.B. Planned Tubing Size/Depth; Sizes Setting Cement **Cement Top and Determination** Hole.....Pipe Method Depths Sx or Cf CIRC ,33/8 810 Existing C 1000 Surface 8' Existind Intermediate 8 206 ନ୍ଦ୍ରତ 1549 460 Existing L Long String 7 DV Tool 6 Total Depth Well File Reviewed Diagrams: Before Conversion After Conversion Elogs in Imaging File: _ Intervals: Depths Formation Producing (Yes/No) GENERAL LOCATION æ h-105 Above (Name and Top) Above (Name and Top) 0 Injection..... 60 Ka 10 10 Interval TOP: PSI Max, WHIP Injection..... KDI 50 Interval BOTTOM: 10 Open Hele (Y/N) C Below (Name and Top Sensitive Areas: -Gapitar Salt Depths Potash Area (R-111-P) Potash Lessee Noticed? Fresh Water: Depths: Wells No vale Affirmative Statement Analysis? Ne Disposal Fluid Sources:_ Analysis? Disposal Interval Production Potential/Testing/Analysis Analysis: Notice: Newspaper(Y/N) V Surface Owner Mineral Owner(s) RULE 26.7(A) Affected Parties: Area of Review: Adequate Map (Y/N) _____and Well List (Y/N) Active Wells Knum Repairs Producing in Injection Interval in AOR Nо ...P&A Wells _____ Num Repairs _____ All Wellbore Diagrams Included? _ **Questions/Required Work:** 191-1 ථ Request Sent 3 Reoly C _Reply: Request Sent Request Sent Reply:

- Jost PS

3/15/2010/3:41 PM

SWD_Checklist.xls/List